DEPARTMENT OF THE ARMY

DoD 23.4 Small Business Innovation Research (SBIR)
Annual Broad Agency Announcement (BAA)
Component-Specific Proposal Instructions
Release 5

February 21, 2023: Topics issued for pre-release March 16, 2023: Army begins accepting proposals via DSIP March 28, 2023: DSIP Topic Q&A closes to new questions at 12:00 p.m. ET April 11, 2023: Deadline for receipt of proposals no later than 12:00 p.m. ET

INTRODUCTION

The future Army must be capable of conducting Multi-Domain Operations (MDO) as part of an integrated Joint Force across an array of situations in multiple theaters by 2035. The MDO concept describes how the Army will support the Joint Force in the rapid and continuous integration of all domains of warfare – land, sea, air, and cyberspace – to deter and prevail as we compete short of conflict, and fight and win if deterrence fail. The Army must provide game-changing capabilities to our Soldiers. To capitalize on small business innovation, the Army has implemented an approach to advertise SBIR funding opportunities through the Department of Defense (DoD) Annual BAA process, outside of the three pre-determined BAA cycles. This approach also strives to create a more rapid award time from solicitation to closing.

CONTACT INFORMATION

Direct Specific questions pertaining to the administration of the Department of the Army SBIR Program and proposal preparation instructions to the Point of Contact identified in the Topic announcement. General questions can be directed to the following:

Email: usarmy.pentagon.hqda-asa-alt.mbx.army-applied-sbir-program@army.mil

Website: https://www.armysbir.army.mil/

Mailing Address:

Army Applied SBIR Office 2530 Crystal Dr; Ste 11192

Arlington, VA 22202

RESPONSIVENESS AND TIMELINESS

All proposals will be evaluated and judged on a competitive basis. Proposals will only be evaluated in response to an active, corresponding Army topic. Proposals will be initially screened to determine responsiveness and timeliness. Proposals passing this initial screening will be technically evaluated by engineers or scientists to determine the most promising technical and scientific approaches. Assessment of responsiveness may continue during technical evaluation and after selection. If at any point the proposal is deemed untimely, unresponsive, ineligible, or non-responsible, the proposal will be rejected / the contract action will be cancelled.

Interested firms shall follow the DoD Program BAA instructions as well as the Army's component-specific proposal instructions herein, when preparing and submitting proposals. The DoD 23.4 SBIR Program BAA can be found here: https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/.

SYSTEM FOR AWARD MANAGEMENT (SAM)

Interested firms are required to be registered in SAM (www.sam.gov) before submitting a proposal and shall continue to be registered until time of award, during performance, and through final payment of any contract.

PHASE I PROPOSAL INSTRUCTIONS

The Defense SBIR/STTR Innovation Portal (DSIP) is the official portal for DoD SBIR/STTR proposal submission. Proposers (also referred to herein as "offeror(s)") are required to submit proposals via DSIP; proposals submitted by any other means will be disregarded. Detailed instructions regarding registration and proposal submission via DSIP are provided in the DoD SBIR Program BAA.

Proposal Coversheet (Volume 1)

The proposal coversheet must follow the instructions and requirements provided in the DoD SBIR Program BAA.

The offeror shall certify that to the best of its knowledge and belief, its eligibility information under the SBIR Program is accurate, complete, and current as of the date of the offer.

Technical Volume (Volume 2)

The technical volume is not to exceed 5 pages and must follow the formatting requirements provided in the DoD SBIR Program BAA. A commercialization plan must also accompany the technical proposal and shall be no more than 8 slides. The commercialization plan must be converted to a pdf and attached to the end of the technical volume, resulting in one pdf file to be uploaded to DSIP as Volume 2. The commercialization plan does not count towards the technical volume 5-page limit. Any proposals submitted without a commercialization plan or in a format other than that provided by the BAA will not be reviewed.

Content of the Technical Volume

The Technical Volume shall contain three key sections – technical approach, team qualifications and commercialization section. The technical approach section shall contain details on how the proposer is going to solve the problem. It shall detail key elements of the firm's approach, any risks, relevant past work and how success is measured. The team qualifications section shall highlight the key personnel working on the project, and the resources that will be brought to bear on solving the problem. The commercialization plan shall include:

- <u>Company information</u>: Focused objectives/core competencies; specialization area(s); products with significant sales; and history of previous Federal and non-Federal funding, regulatory experience, and subsequent commercialization successes.
- <u>Customer and Competition</u>: Clear description of key technology objectives, current competition, and advantages compared to competing products or services; description of hurdles to acceptance of the innovation.
- <u>Market</u>: Milestones, target dates, analyses of market size, and estimated market share after first year sales and after 5 years; explanation of plan to obtain market share.
- <u>Intellectual Property</u>: Patent status, technology lead, trade secrets or other demonstration of a plan to achieve sufficient protection to realize the commercialization stage and attain at least a temporal competitive advantage.
- Financing: Plans for securing necessary non-SBIR funding.
- <u>Assistance and mentoring</u>: Plans for securing needed technical or business assistance through mentoring, partnering, or through arrangements with government sponsored (e.g., State assistance programs, Federally-funded research laboratories, Manufacturing Extension

Partnership centers), not-for-profits (e.g., SBDC), commercial accelerators, DOD Prime Contractors, or other assistance provider.

These instructions supersede those stated in section 5.3.c of the DoD Program BAA.

Cost Volume (Volume 3)

The Cost Volume must follow all instructions and requirements provided in the DoD SBIR Program BAA. Supplemental requirements are as follows:

The Phase I Base amount must not exceed \$150,000 for a 4-month period of performance. Phase I Options are not anticipated at this time. If an option is identified in the topic posting, costs for the Base and Option must be separated and clearly identified on the Proposal Cover Sheet (Volume 1) and in Volume 3. Awards for these topics will be in the form of a firm fixed price contract.

Please review the updated Percentage of Work (POW) calculation details included in section 5.3 of the DoD Program BAA. Army Applied SBIR will occasionally accept deviations from the POW requirements with written approval from the Funding Agreement officer.

For pricing purposes, offerors shall assume a contract or agreement start date of approximately ninety (90) days after submission of the proposal. For this BAA, adequate price competition (APC), as defined in FAR 15.403-1(c), is anticipated. In the event that adequate price competition is not realized (i.e. only one proposal is received for a given topic), the Government may choose to conduct additional proposal analysis, in accordance with the techniques identified at FAR 15.404-1. Additionally, offerors are to provide any current Forward Pricing Rate Agreements (FPRA) in effect at time of proposal submission.

Content of the Cost Volume (Volume 3)

ALL proposed costs should be accompanied by documentation to substantiate how the cost was derived. Substantiating documentation guidance is as follows:

• LABOR:

- List all key personnel by name as well as by number of hours dedicated to the project as direct labor.
- Explain the basis of proposed labor hours, including required tasks, and substantiating documentation for the costs (e.g. payroll reports). Volume 5, Supporting Documents, may be used if additional space is needed.

MATERIAL/TOOLING/EQUIPMENT:

- Explain the basis of proposed material and equipment costs. This support should include a consolidated priced summary of individual material and equipment quantities and substantiating documentation for the costs (e.g. vendor quotes, invoice prices, competitive bids, etc.). If your choice isn't the lowest cost available, explain the decision to choose one item or supplier over another. Volume 5, Supporting Documents, may be used if additional space is needed.
- Ensure all materials are American-made to the maximum extent practicable.
 Offerors who propose to use a foreign-made product in its technology may be

required to find an American-made equivalent.

While special tooling and test equipment and material cost may be included, it will be carefully reviewed relative to need and appropriateness for the work proposed. The purchase of special tooling and test equipment must, in the opinion of the Component Contracting Officer, be advantageous to the Government and should be related directly to the specific topic. These may include such items as innovative instrumentation or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will be vested with the DoD Component, unless it is determined that transfer of title to the contractor would be more cost effective than recovery of the equipment by the DoD Component.

• TRAVEL:

- Explain the basis of proposed travel, including to/from locations, number of trips, number of travelers per trip, and number of days/nights per trip. Include substantiating documentation for the costs (e.g. screenshots of flight cost comparison, rental car quotes, etc.). NOTE: Virtual meetings shall be utilized to the maximum extent practicable. Volume 5, Supporting Documents, may be used if additional space is needed.
- SUBCONTRACTS: A subcontract is any agreement, other than one involving an employer-employee relationship, entered into by the prime contractor (awardee) calling for supplies or services for the performance of the contract.
 - All subcontractor costs and consultant costs must be detailed at the same level as prime contractor costs in regard to labor, travel, equipment, etc.
 - Explain the basis of proposed subcontract costs. Include documented support of the offeror's price analyses and degree of competition of all subcontractor proposals. All subcontractor costs and consultant costs, such as labor, travel, equipment, materials, must be detailed at the same level as prime contractor costs. Provide detailed substantiation of subcontractor costs in your cost proposal. Volume 5, Supporting Documents, may be used if additional space is needed.
 - Certify that the following requirements are met: For Phase I, the offeror must perform a minimum of two-thirds of the research and/or analytical effort.
 One third may be subcontracted to another firm or research organization/facility. The percentage of work is measured by both direct and indirect costs.
 - Offerors shall not propose to subcontract to the issuing agency, to any other Federal Government agency, or to other units of the Federal Government, except Federal Laboratories in rare circumstances. As defined in 15 U.S.C. 3703, Federal Laboratory means any laboratory, any federally funded research and development center, or any center established under 15 U.S.C. 3705 and 3707 that is owned, leased, or otherwise used by a Federal Agency and funded by the Federal Government, whether operated by the Government

or by a contractor.

- Offerors shall not propose to subcontract to any prohibited sources. Proposals identifying a subcontractor/vendor arrangement with a prohibited source may be rejected.
- Offerors shall ensure subcontracting arrangements are with United States Small Businesses to the maximum extent practicable. Offerors proposing a subcontractor arrangement with other than a United States Small Business (such as, a large business, foreign firm, foreign government, educational institution, unit of Federal Government, etc.) may be required to submit further explanation.

INDIRECT COSTS:

- Explain the basis of the proposed indirect expense rates including overhead, general and administrative, material handling, and fringe benefits.
- If a Defense Contract Audit Agency (DCAA) Audit has been conducted within the last five (5) years, include the audit compliance documentation in the cost proposal documents. The documentation should also include the offeror's DCAA Point of Contact (if applicable).

If selected, failure to include the documentation with your proposal may delay contract award, as the proposer will be asked to submit the necessary documentation to the Contracting Officer to substantiate costs. It is important to respond as quickly as possible to the Contracting Officer's request for documentation. Failure or refusal to provide documentation may result in cancellation of the contract action.

Company Commercialization Report (CCR) (Volume 4)

Completion of the CCR as Volume 4 of the proposal submission in DSIP is required. Please refer to the DoD SBIR Program BAA for full details on this requirement. Information contained in the CCR will be considered by the Department of the Army during proposal evaluations.

Supporting Documents (Volume 5)

Volume 5 is provided for proposers to submit additional documentation to support the Cover Sheet (Volume 1), Technical Volume (Volume 2), and the Cost Volume (Volume 3). In addition to the Volume 5 requirements outlined in the DoD Program BAA, the Department of the Army may accept the following documents in Volume 5:

- o Additional Cost Information
- o Funding Agreement Certification
- o Technical Data Rights (Assertions)
- o Lifecycle Certification
- o Allocation of Rights
- Other (only as specified in the topic)

Please only submit documents that are identified immediately above and in the DoD Program BAA. All other documents submitted will be disregarded.

PHASE II PROPOSAL INSTRUCTIONS

Phase II proposals may only be submitted by Phase I awardees. Phase II proposal submission window, notification process, expected budget/duration structure and additional instructions will be provided in the Phase I contract or by subsequent notification.

DISCRETIONARY TECHNICAL AND BUSINESS ASSISTANCE (TABA)

The Army, at its discretion, may provide Technical and Business Assistance (TABA). The Army will select a preferred vendor(s) for the Army SBIR TABA program through a competitive process. Alternately, a small business concern may, by contract or otherwise, select one or more vendors to assist the firm in meeting the TABA goals. The Applicant must request the authority to select its own TABA provider in its Army SBIR proposal and must demonstrate that the vendor is uniquely postured to provide the specific technical and business services required. TABA funding will be denied if the offeror fails to include the cost and detailed explanation in its proposal.

Participation in the Army SBIR TABA program is voluntary for each Army SBIR awardee. Services provided to Army SBIR firms under the auspices of the TABA program may include, but are not limited to:

- 1. Access to a network of scientists, engineers, and technologists focused on commercialization and transition considerations such as protected supply chain management, advanced manufacturing, process/product/production scaling, etc;
- 2. Assistance with intellectual property protections, such as legal considerations, intellectual property rights, patent filing, patent fees, licensing considerations, etc;
- 3. Commercialization and technology transition support such as market research, market validation, development of regulatory or manufacturing plans, brand development;
- 4. Regulatory support such as product domain regulatory considerations, regulatory planning, and regulatory strategy development.

The Army SBIR program sponsors participation in the TABA program. The resource limitation for each firm is as follows:

• Phase I Firms:

- Army-Preferred Vendor: If approved, the contractor may receive up to \$6,500 worth of assistance services per project per year (in addition to the base SBIR award amount).
- o Firm-Selected Vendor: If approved, the contractor may receive up to \$6,500 in contract obligation (in addition to the base SBIR award amount) per project per year.

• Phase II Firms:

- o Army-Preferred Vendor: If approved, the contractor may receive up to \$50,000 worth of assistance services per project per year (in addition to the base SBIR award amount).
- o Firm-Selected Vendor: If approved, the contractor may receive up to \$50,000 in contract obligation (in addition to the base SBIR award amount) per project per year.

EVALUATION AND SELECTION

The Army will conduct an evaluation of each responsive, timely, eligible proposal in accordance with the evaluation criteria listed in the DoD Program BAA. It is the policy of the Army to ensure equitable and comprehensive proposal evaluations based on the evaluation criteria and to select the source (or sources) whose offer meets the Government's technical, policy, and programmatic goals.

As previously stated herein, timeliness, responsiveness, and eligibility will be assessed upon initial screening, during evaluation, and after selection. Proposals that do not comply with the instructions and

requirements detailed in this document, the DoD Program BAA, or the corresponding Topic posting (including the research objective(s)), will be considered ineligible, nonresponsive, untimely, or non-conforming and therefore will not be evaluated or considered for award.

Using the evaluation criteria, the Government will evaluate each responsive, timely, eligible proposal in its entirety. Proposals will not be evaluated against each other during the evaluation process, but rather evaluated on their own individual merit to determine how well the proposal meets the criteria stated in this BAA and the corresponding opportunity.

Selected proposals are those determined to be the most advantageous to the Government, consistent with instructions and evaluation criteria specified in the DoD Program BAA, the component-specific instructions herein, the corresponding Topic posting, and availability of funding.

Proposing firms will be notified via email of selection or non-selection status for a Phase I or direct to Phase II award within 90 days of the closing date of the Topic. The notification will be sent to the Corporate Official listed on the proposal cover sheet from the Army SBIR Program Office mailbox. The Army promotes transparency regarding the technical evaluation for all Army SBIR proposals. The Army will provide a technical evaluation narrative to the proposer in accordance with the SBA Policy Directive, Appendix I, paragraph 4. The selection decision notice contains instructions for retrieving the technical evaluation narrative.

Proposers must not regard the notification email (selection decision notice) as an authorization to commit or expend funds. After the Army SBIR Office has recommended a proposal for award, a Government Contracting Officer may contact the proposer in order to discuss and request additional information required for award. This may include representations and certifications, certified or other than certified cost data, subcontracting plan for small businesses, and/or other information as applicable to the proposed award. Proposers must not regard these communications as an authorization to commit or expend funds. Unless a Government Contracting Officer signs the award document (i.e. contract), no obligations to provide funding are made. The Government may reject the proposal or cancel the contract action at any time.

If signed by the Government Contracting Officer, the award document is the official and authorizing instrument (i.e. contract). The anticipated period of performance start date will be determined at time of award. The Contracting Officer will email the signed, authorizing award instrument to the principal investigator (PI) and/or an authorized organization representative.

PROTESTS

Refer to the DoD SBIR Program BAA for procedures to protest the Announcement.

As further prescribed in FAR 33.106(b), FAR 52.233-3, Protests after Award shall be submitted to the Point of Contract identified in the topic solicitation:

Email: usarmy.pentagon.hqda-asa-alt.mbx.army-applied-sbir-program@mail.mil Mailing Address:
Army Applied SBIR Office
2530 Crystal Dr; Ste 11192
Arlington, VA 22202

Appendix A Phase I Evaluation Criteria

Applied SBIR Phase I Proposal Review v2-0-3 Evaluation Criteria Defined SBIR DEFINITION INTRODUCTION Write a clear, concise description of what your innovation does or will do, and where you are in your evolution. Make clear its intended impact on the Army. Evaluators should "get it" after reading this. POTENTIAL FOR ARMY At the scale of a single Army end-user, argue that their jobs or lives will be significantly improved if IMPACT OPERATIONAL IMPACT your solution is adopted. What is the impact of your solution for a soldier/Army civilian vs. today's solutions? Here, we're looking for an idea of how broad the impact you described above could be. Look into POTENTIAL SCALE OF weight 25% the future to a time when your solution is both technically mature and actively in use by Army IMPACT personnel. Describe the scale and scope of your impact within the context of the Army TECHNICAL FEASIBILITY is the science behind the solution sound? Convince readers who don't have deep expertise in your SCIENTIFIC FEASIBILITY field that your innovation is built atop sound scientific and engineering principles Point to the foundational technologies that you rely on to deliver your solution. Do the required ENABLING enabling technologies introduce added risk? Using proven (and ideally Army-fielded) underlying **TECHNOLOGIES** technologies and techniques helps to lower technical risk. ALTERNATIVE From a technologist's perspective, why is your proposed solution the best choice for the Army? **TECHNICAL** Refute the alternative engineering approaches others are using. Why does your technology win? APPROACHES TECHNICAL RISK No matter your current technology readiness level, technical risks remain. Identify those risks. WHIGHT EST-MITIGATION Present a credible plan to tackle those risks. TRANSITION Planning for success, what's next for you after this SBIR award? Describe the next type of deal you aim to make with the Army, e.g. a CRADA, a different SBIR contract, a CSO, etc. Briefly outline your ARMY TRANSITION PATHWAY current plan to unlock that next opportunity and/or share the biggest risks you see post this SBIR Please share with us a thoughtful execution plan. Strike a balance between giving us a sense of SBIR MILESTONE winight 20% the detailed thinking behind the scenes and the need for your contracting officer to manage a SCHEDULE reasonably small number of milestones during your period of performance FIRM CASH FLOW SBIR funds are meant to fuel growth rather than stave off a firm's impending financial failure. FIRM SURVIVAL RISK Demonstrate that your company will survive financially as a going concern through the early stages of a Phase III contract, sometimes referred to as "transitioning" into use by Army personnel. Make the case that non-Army and/or non-DoD dollars will continue to fund improvements to your solution from which the Army will benefit in the future. Companies who cannot demonstrate non-OTHER PEOPLE'S MONEY Army and/or non-DoD funding sources for future solution enhancements are less attractive to the Applied SBIR program. Through the Applied SBIR program, the Army wants to take advantage of the speed and scalability FINANCIAL PROFIT of dual-use companies. Make your best case that your product is or will be profitable. If you have more than one product, please focus your argument on the product / solution presented for this wegte 10% POTENTIAL SBIR program. TEAM ABILITY Prove your team has executed well as a group. Please draw clear distinctions between private weight 10% sector, DoD and civilian government work. What milestones have you accomplished as a group in this company? SUBMISSION QUALITY QUALITY OF PROSE Prove you write clearly. Prove you argue convincingly DATA QUALITY & WHISTE SK Support your arguments with relevant, properly attributed data to enhance your credibility ATTRIBUTION

Appendix B Direct to Phase II Evaluation Criteria

Applied SBIR D2P2 P	roposal Review v2-	-0-4 Evaluation Criteria Defined	SBIR	
		DEFINITION		
INTRODUCTION	weight 2%	Write a clear, concise description of what your innovation does evolution. Make clear its intended impact on the Army. Evaluat		
POTENTIAL FOR ARMY IMPACT	OPERATIONAL IMPACT		scale of a single Army end-user, argue that their jobs or lives will be significantly improved if olution is adopted. What is the impact of your solution for a soldier/Army civilian vs. today's ans?	
weight 20%	POTENTIAL SCALE OF IMPACT	Here, we're looking for an idea of how broad the impact you de the future to a time when your solution is both technically mat- personnel. Describe the scale and scope of your impact within	ure and actively in use by Anny	
TECHNICAL FEASIBILITY	SCIENTIFIC FEASIBILITY	is the science behind the solution sound? Convince readers wif field that your innovation is built atop sound scientific and engin		
	ENABLING TECHNOLOGIES	Point to the foundational technologies that you rely on to delive enabling technologies introduce added risk? Using proven (and technologies and techniques helps to lower technical risk.		
	ALTERNATIVE TECHNICAL APPROACHES	From a technologist's perspective, why is your proposed solution. Herfute the alternative engineering approaches others are using		
megnt JUS	TECHNICAL RISK MITIGATION	No matter your current technology readiness level, technical re Present a credible plan to tackle those risks.	sks remain. Identify those risks.	
TRANSITION	ARMY TRANSITION PATHWAY	Planning for success, what's next for you after this SBIR awars aim to make with the Army, e.g. a CRADA, a different SBIR concurrent plan to unlock that next opportunity and/or share the blaward.	tract, a CSO, etc. Briefly outline you	
weight 20%	SBIR MILESTONE SCHEDULE	Please share with us a thoughtful execution plan. Strike a balar the detailed thinking behind the scenes and the need for your reasonably small number of milestones during your period of p	contracting officer to manage a	
FIRM CASH FLOW	FIRM SURVIVAL RISK	SBIR funds are meant to fuel growth rather than stave off a fa Demonstrate that your company will survive financially as a go of a Phase III contract, sometimes referred to as 'transitioning	ng concern through the early stage	
	OTHER PEOPLE'S MONEY	Make the case that non-Army and/or non-DoD dollars will conti solution from which the Army will benefit in the future. Compar Army and/or non-DoD funding sources for future solution enha Applied SBIR program.	iles who cannot demonstrate non-	
weight 15%.	FINANCIAL PROFIT POTENTIAL	Through the Applied SBIR program, the Army wants to take at of dual-use companies. Make your best case that your product more than one product, please focus your argument on the proSBIR program.	t is or will be profitable. If you have	
TEAM ABILITY	weight 10%	Prove your team has executed well as a group. Please draw ck sector, DoD and civilian government work. What milestones ha this company?		
SUBMISSION QUALITY	QUALITY OF PROSE	Prove you write clearly. Prove you argue convincingly.		
weight 3%	DATA QUALITY & ATTRIBUTION	Support your arguments with relevant, properly attributed data	to enhance your credibility.	
TEAM ABILITY SUBMISSION QUALITY	QUALITY OF PROSE DATA QUALITY &	Prove your team has executed well as a sector, DoD and civilian government work this company? Prove you write clearly: Prove you argue (What milestones ha	
id Eval		Page 1 of 2 #2011 - 20	22 Valid Evaluation, Inc. All rights rese	

Appendix C Phase II Evaluation Criteria

		DEFINITION	
INTRODUCTION	weight 2%	Write a clear, concise description of what your innovation does or will do, and where you are in your evolution. Make clear its intended impact on the Army. Evaluators should 'get it' after reading this.	
POTENTIAL FOR ARMY IMPACT	OPERATIONAL IMPACT	At the scale of a single Army end-user, argue that their jobs or lives will be significantly improved your solution is adopted. What is the impact of your solution for a solidier/Army civilian vs. today's solutions?	
weight 20%	POTENTIAL SCALE OF IMPACT	Here, we're looking for an idea of how broad the impact you described above could be. Look into the future to a time when your solution is both technically mature and actively in use by Army personnel. Describe the scale and scope of your impact within the context of the Army.	
TECHNICAL FEASIBILITY	SCIENTIFIC FEASIBILITY	is the science behind the solution sound? Convince readers who don't have deep expertise in you field that your innovation is built atop sound scientific and engineering principles.	
	ENABLING TECHNOLOGIES	Point to the foundational technologies that you rely on to deliver your solution. Do the required enabling technologies introduce added risk? Using proven (and ideally Army-fielded) underlying technologies and techniques helps to lower technical risk.	
	ALTERNATIVE TECHNICAL APPROACHES	From a technologist's perspective, why is your proposed solution the best choice for the Army? Refute the alternative engineering approaches others are using. Why does your technology win?	
eeight 25%	TECHNICAL RISK MITIGATION	No matter your current technology readiness level, technical risks remain. Identify those risks. Present a credible plan to tackle those risks.	
TRANSITION	ARMY TRANSITION PATHWAY	Planning for success, what's next for you after this SBIR award? Describe the next type of deal you aim to make with the Army, e.g. a CRADA, a different SBIR contract, a CSO, etc. Briefly outline you current plan to unlock that next opportunity and/or share the biggest risks you see post this SBIR award.	
weight 25%	SBIR MILESTONE SCHEDULE	Please share with us a thoughtful execution plan. Strike a balance between giving us a sense of the detailed thinking behind the scenes and the need for your contracting officer to manage a reasonably small number of milestones during your period of performance.	
FIRM CASH FLOW	FIRM SURVIVAL RISK	SBIR funds are meant to fuel growth rather than stave off a firm's impending financial failure. Demonstrate that your company will survive financially as a going concern through the early stages of a Phase III contract, sometimes referred to as "transitioning" into use by Army personnel.	
	OTHER PEOPLE'S MONEY	Make the case that non-Army and/or non-DoD dollars will continue to fund improvements to your solution from which the Army will benefit in the future. Companies who cannot demonstrate non-Army and/or non-DoD funding sources for future solution enhancements are less attractive to the Applied SBIR program.	
weight 20%	FINANCIAL PROFIT POTENTIAL	Through the Applied SBIR program, the Army wants to take advantage of the speed and scalability of dual-use companies. Make your best case that your product is or will be profitable if you have more than one product, please focus your argument on the product./ solution presented for this SBIR program.	
TEAM ABILITY	weight 5%	Prove your team has executed well as a group. Please draw clear distinctions between private sector, DoD and civilian government work. What milestones have you accomplished as a group in this company?	
SUBMISSION QUALITY	QUALITY OF PROSE	Prove you write clearly. Prove you argue comincingly.	
segre 3%	DATA QUALITY & ATTRIBUTION	Support your arguments with relevant, properly attributed data to enhance your credibility.	

General Instructions/Guidance:

- 1. The slide deck will not exceed a maximum of 8 slides, per Component Instructions. Font size shall be no smaller than 10-point font.
- 2. This template is to give you basic guidance and information that the evaluation team would like to see regarding your small business. How you define, answer, and implement that information within the slide deck is up to your creative technical expertise.
- 3. Slides should display the slide number in bottom right corner
- 4. All text (including tables, charts, plots, axes labels, legends, captions) must be readable without zooming and understandable without voice-over
- 5. For plots and charts:
 - a. Include title/bullet describing importance of plot/chart, and/or data (be specific)
 - b. Axes must be meaningfully labeled (to be understandable by non-experts) and include scale
- 6. Avoid jargon; define technical terms
- 7. Save as a PDF file for submission to DSIP
- 8. To insert images, capture a screenshot of the image and paste it into the slide. Please do not dragdrop a file into the presentation or use the Insert Pictures menu function.
- 9. Use PowerPoint's "Compress Pictures" feature to reduce file size
 - a. Select 96ppi resolution
 - b. Uncheck "For this picture only"
- 10. Replace the boilerplate footer below with distribution markings as appropriate
- 11. Do not put any company logos (Twitter, Reddit, GitHub, etc) on your slides

^{***}Any submission over 10 slides will be deemed noncompliant and will not be evaluated.***

Firm Name

SBIR Project Title

Principal Investigator Name / Title Key (or other relevant) Personnel, and Subcontractors

Insert Topic Number
Insert Proposal Number

Distribution markings as appropriate for your organization

BLUF: Bottom Line Up Front

- BLUF:
 - **1. Company information and background**: Core competencies, significant sales, previous funding, commercialization successes.
 - 2. Customer and Competition: Clear description of key technology objectives, current competition, and advantages.
 - 3. Market: Plan to obtain market share.
 - **4. Intellectual Property**: Patent status, technology lead, trade secrets or other demonstration of a plan to protect the company's technical advantage.
 - **5. Financing/Revenue**: Plans for securing necessary non -SBIR funding.
 - **6. Assistance and mentoring**: Plans for securing needed technical or business assistance.

Company Information and Background

- · Core competencies and areas of specialization.
- · Products with significant sales.
- Concise history of previous Federal and non -Federal funding/investments.
- Regulatory experience (if applicable).
- · Past commercialization successes.
- Past failure and how you overcame.

Distribution markings as appropriate for your organizatio

Customer & Competition

- · Description of key technology objectives.
- · Current competition and/or alternative solutions.
- Advantages of company's offer compared to competing products or services.
- · Hurdles to acceptance of the proposed innovation.
- Description of possible areas where your technology may be utilized or is under utilized.

Market

- Analysis of market size and 1 and 5 year forecasted market share.
- Explanation of milestones and target dates of plan to obtain that market share.
- What experience do you have with marketing to this target market?
- · What commercialization strategy appears to be the best for bringing this product to the target market?
- What experience do you have with bring products to market either through this company or though other companies with which you have worked.
- Does the company currently market, manufacture, or license technology? Describe what you do.

Distribution markings as appropriate for your organization

Intellectual Property

- Patent status, technology lead, trade secrets or other demonstration of a plan to achieve sufficient protection to realize the commercialization stage and attain at least a temporary competitive advantage .
- Describe how you will protect the intellectual property that enables commercialization of its products
 while keeping competitors at bay. Note any actions you may consider to attain at least a temporary
 competitive advantage. Also consider your company's prior record in this area. Comment on your
 company's strategy to build a sustainable business through protection of intellectual property.

Financing

- Plan for securing non-SBIR, private or government funding necessary to enter low rate of production of anticipated technical solution.
- Describe your revenue steam generation to include but not limited to:
 - · Manufacture and direct sales
 - Sales through value added resellers or other distributors
 - Joint venture

Distribution markings as appropriate for your organization

Assistance & Mentoring

 Plans for securing needed technical or business assistance through mentoring, partnering, or arrangements with government sponsored (e.g., SBIR funded Discretionary Technical and Business Assistance (TABA), State assistance programs, Federally-funded research laboratories, Manufacturing Extension Partnership centers), not-for-profits (e.g., Small Business Development Center (SBDC) or Small Business Technical Development Center (SBTDC)), commercial accelerators, DOD Prime Contractors, SBA Mentor - Protégé program, Procurement Technical Assistance Center (PTAC) or other assistance provider.

Army SBIR 23.4 Topic Index Release 5

A234-008 Army Tech Marketplace

A234-008 Army Tech Marketplace

OUSD (R&E) CRITICAL TECHNOLOGY AREA(S): Advanced Computing and Software, Integrated Network Systems-of-Systems and Trusted AI and Autonomy

TOPIC OBJECTIVE: To develop, integrate and deploy a technology with a simple intuitive user interface to improve information exchange and the discovery of collaboration opportunities within the Army R&D and Acquisitions communities as well as between the Army and private sector technology providers and private sector technology integrators. The intent is to improve the transition of R&D-funded technologies into the Army enterprise.

TOPIC DESCRIPTION: The Army research and development ecosystem does not have a simple, intuitive portal for Army research centers and acquisition offices to access information related to Army R&D investments, including technology capabilities, technology maturity level, milestone delivery schedules, etc. The lack of direct access to internal information and data limits internal Army awareness and analysis of potentially valuable technologies to support the Army enterprise. The result is a less robust use of R&D investments, missed collaborations and co-investments, and an overall decrease in the likelihood of critical technologies transitioning into the Army enterprise to support the Soldier.

The Army Tech Marketplace is envisioned as a web-based knowledge management and collaboration platform with an intuitive user-friendly interface that enhances transparency and simplifies access to R&D-funded technologies for Army stakeholders and private sector innovators to share, retrieve, and analyze information, and collaborate. The Army Tech Marketplace should provide an artificial intelligence and data-fusion capability to assess the probability of technologies to transition, identify trends within the Army enterprise, and maximize the value of business intelligence data to support agile Army decision-making.

This effort seeks to create a platform for sharing information at the appropriate level first between different Army offices and second with members of the innovation economy. The effort will prioritize an internal Army-focused side connecting R&D needs and gaps with funding and resource opportunities. Internally, it must be a common, IL4 secure space for the Army and eventually, Joint Service research centers, acquisitions, and SBIR programs to learn of cross-organizational activities, mitigate R&D risks by learning from others, and dynamically exploit opportunities for collaboration. It will also have a generally accessible, external-to-the-Army side connecting innovation economy firms with Army technology challenges and the Army Program Executive Offices working to address those challenges. Externally, the Army Tech Marketplace permits Army, Joint Services, and innovation economy members to appropriately share information, build relationships, and facilitate collaboration, contracts, and integration of innovations into the Army enterprise.

Integral to the platform must be data analytics and artificial intelligence enabled tools to assist internal Army Tech Marketplace users to assess technologies and trends to improve interactions with external members, as well as leverage the total value of the data on the platform to improve Army Tech Marketplace operations. These capabilities should be accessed through a simple graphical intuitive user interface that can serve users of various proficiencies and knowledge. The platform should be vetted from both a software and usability standpoint.

The following are the generalized steps required of the company performing this work to frame and inform their proof-of-concept deliverable:

1. Work with Army SBIR Program to align project goals, requirements, and roles.

- 2. Engage key stakeholders identified by Army SBIR Program to conduct problem framing and stakeholder mapping activities to engage, discover questions, clarify language, and develop instruments useful to the stakeholders.
- 3. Review and present findings on similar products and services that other military Services and private organizations use that may have similar or overlapping use cases.
- 4. Collaborate with Army SBIR Program to identify and outline a detailed project plan, timeline, goals, scoping, and discovery outline intended to form the basis of anticipated Phase 2 work.

The following are success criteria for this effort:

- 1. Internal Army and External Innovation Economy: Separation within the platform of internal Army stakeholder site from external emerging technology accessible site. The internal, Army-only site must achieve DOD IL-4 to handle Army data up to Controlled Unclassified Information (CUI). The external, innovative economy-oriented side of the platform should achieve DOD IL 2 (Public or Non-Critical Mission Information).
- 2. Collaboration: Enable collaboration across multiple Army users and private sector innovation economy firms.
- 3. Ease of Use: An intuitive interface informed by a human-centered design approach that results in a layout and graphics requiring minimal familiarization for basic portal navigation. Must be easy to customize fields to provide flexibility and offer a simplified Search Engine.
- 4. Workflow: Process tracking, routing, reminders, and ability to assign follow-on tasks.
- 5. Platform Modularity: Build a modular platform capable of easy expansion in both scale of participants and the scope of capabilities.
- 6. Reporting & Accountability: The ability to easily retrieve data and insights and track progress on pre-determined metrics. Includes but not limited to reporting and dashboards or other business intelligence tools to help visualize the data.
- 7. Analytics: Offer data analytics and artificial intelligence enabled tools for trend analysis, customer discovery, and continuous improvement actions across the platform.
- 8. Lifecycle Cost: Respecting the platform's modular approach, create a total lifecycle cost model to account for implementation, training, and ongoing licensing/support costs.

PHASE I: Starting in FY23, Phase I would be for multiple awards of \$150,000 each with a 4-month period focused on technical value, commercial merit, and feasibility of proposed solutions. At a minimum, the deliverable from Phase I would be a detailed technical presentation on the design and attributes of the proposed platform conforming to the eight success criteria listed in the Topic Description.

PHASE II: In FY 23, an award would be made to refine the plan developed in Phase I and create a minimum viable platform for testing and evaluation by the Army Applied SBIR Program and its stakeholders employing the eight success criteria listed in this Topic Description. These criteria are subject to revision based on the results of the outcome of the Phase I effort.

PHASE III DUAL USE APPLICATIONS: The proposed technology has potential use within the Army Small Business Innovation Research Program as well as other Army Research Centers and acquisition programs.

KEYWORDS: R&D; research and development; portal; Webpage integration; knowledge management; collaboration platform; innovation economy; tech marketplace; software; website

REFERENCES:

https://www.armysbir.army.mil/topics/

 $\underline{https://www.ausa.org/sites/default/files/SR-1990-A-Primer-on-Research-and-Development-in-the-US-\underline{Army.pdf}}$

TPOC-1: Blaise Zandoli

Email: <u>blaise.zandoli2.ctr@army.mil</u>